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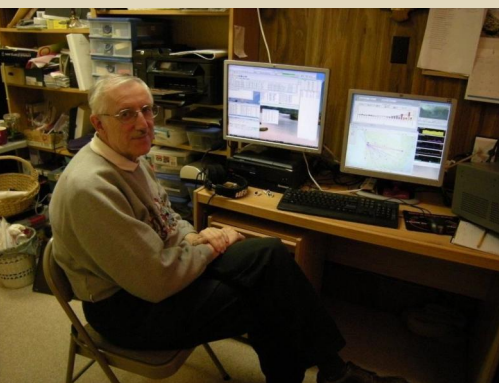
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News You Can Lose

and Much More!



It's Contest Season!



The February 2014 Newsletter of the Surrey Amateur Radio Club
Next General Meeting February 12th



The Communicator



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AMATEUR RADIO CLUB**

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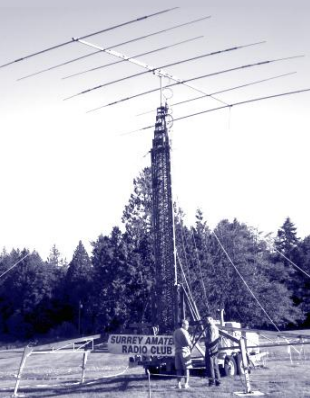
Nelson Eisel VE7NAE

VIA THE WEB

www.ve7sar.net

The SARC Communicator is published monthly for members of the Surrey Amateur Radio Club.

SARC maintains a website at www.ve7sar.net that includes club history, meetings, news and other information.



January Monthly Meeting Minutes

January 8, 2014

22 members and guests attended

Introductions and Announcements

John VA7XB welcomed Sally Finora VA7SMF and Adam Farson VA7OJ from NSARC to the meeting.

It was noted that a post-meeting social will continue at MacDonalds (Fraser Hwy & 156th St.)

The Friday breakfast group now meets at Kalmar 81st Ave & King George Blvd from 8-9 am

Feb. 1st CPR course ("Barge-in" 144th St & 72nd Ave) - noted that the date will have to be changed because of a conflict with the BC QSO Party

A field trip is planned for the spring to the Radio Museum - either Coquitlam or Bellingham

A repeater visit is also planned for the spring, now that interior air quality problem is mostly resolved

Committee Reports—Financial

Scott VE7HA reported healthy bank balances in the chequing and savings accounts

Scott reported a net profit of \$130 on the Sony soundbar raffle

Net cost to club of the Christmas party was \$370, about the same as last year

Scott indicated that Paypal on the website will soon be available for dues and other payments

Membership

Bill VA7ZBL reported the current membership roster at 68 plus 2 renewals today = 70 members

Christmas Party

The Kalmar has been booked for Dec. 6, 2014

SEPAR

Report not available

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[click on the links below](#)

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Radio-Active

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RAC News

February SARC Calendar

	SEPARS Net	SARC Net
1 st Tuesday	Drew VA7DRW Jay VE7OFH Standby	Brett Garrett VE7GM
2 nd Tuesday	Dixie VA7DIX Alan VA7BIT Standby	Jinty VA7JMR
3 rd Tuesday	Rob VE7CZV	Anton VE7SSD
4 th Tuesday	Peter VE7PGX Dixie VA7DIX Standby	John VA7XB
5 th Tuesday	Jinty VA7JMR	Elizabeth VE7ELA
Want a turn at Net Control? Contact the SARC Net Manager VE7CZV @ separs.net		

CLUB EXECUTIVE 2013-2014

PRESIDENT

John Brodie VA7XB

VICE PRESIDENT

Brett Garrett VE7GM

SECRETARY

Rob Gilchrist VE7CZV
(also Net Manager)

TREASURER

Scott Hawrelak VE7HA

DIRECTORS

John Schouten VE7TI
(Communicator Editor)

George Merchant
VE7QH (Repeaters)

Bill Little VA7ZBL
(Membership)

Bill Gipps VE7XS

SARC hosts an Amateur Radio net each Tuesday evening at 8 PM. Please tune in to the VE7RSC repeater at 147.360 MHz (+600 KHz) Tone=110.9, also accessible on IRLP node 1736 and Echolink node 496228. On UHF we operate a repeater on 443.775MHz (+5Mhz) Tone=110.9 and EchoLink Node 1737

Repeater

George VE7QH reported that the repeaters are now working well and the CTCSS tone on the repeater's transmit has been restored.

Quotes are awaited to physically isolate the repeaters from the boiler room.

Website

Hui VE7YXG reported that obsolete material has been removed from the website and some revisions have been made to bring it up-to-date

Members are asked to review the web content and report any need for further revisions

Equipment

John VA7XB reported that all items in storage at Firehall #17 have now been stored as securely as possible and that Rick VE7GMO will be fixing the trailer wiring

Operator Training

Brett VE7GM reviewed the contests scheduled for the next several months including:

- Jan. 18-19 NA QSO Party (SSB) - VE7IO and VA7XB stations both available
- Feb. 1 BC QSO Party (all modes)
- Feb. 8-9 CQ WW WPX (RTTY)

In keeping with our recent success in achieving #1 in Canada for Class 3A, Brett emphasized that those who hope to operate at Field Day must avail themselves of the training opportunities and be fully proficient to operate in "Run" mode

John VA7XB stated that for most training events we are now using the club callsign VE7SAR and QSLs are starting to roll in - Nelson VE7NAE as QSL manager is taking care of responding.

Brett VE7GM read from an email sent by Jim VE7FO to the effect that members interested in Worked All States (WAS)

award should consider participating in the ARRL Centennial QSO Party, in which W1AW operates from 2 different states each week.

FD Planning

Brett VE7GM indicated that FD planning has commenced, with an objective in 2014 to better our 2013 score.

John VA7XB stated that a Surrey Community grant of \$550 towards Field Day expenses has been confirmed and that Surrey Fire Services has been requested to secure the use of Grandview Heights school grounds for the event.

February Meeting

John VA7XB stated that the theme of the February meeting will be "Getting Started on HF" with each of the following 5-minute topics presented; the emphasis will be on simplicity and low cost:

- Why HF?
- HF Bare Basics
- Power supplies
- Power connectors and cabling
- Options for limited space antennas
- Coax options incl. connectors
- Where and when to find the contacts

New Business

None

Guest & Presentation

After a break for coffee, John VA7XB introduced the featured presenter, Adam Farson VA7OJ/AB4OJ, his topic being German WW2 Radio: Technology, Equipment & Innovations. Following Adam's stimulating talk and many questions, he was thanked by John and presented with a bottle of Pinot Noir.

After a draw for the 50/50, the meeting was adjourned at approx. 2105.

DOWN THE LOG...

SARC Monthly Meetings

2nd Wednesday (Sept-Jun)
1900 hrs local at the Emergency Management BC PREOC,
14275 96th Avenue, Surrey, BC

Weekly Club Breakfast

Friday at 0800 local
ABC Country Restaurant at
600 - 7380 King George Blvd.
Surrey

SARC Net

Tuesday at 2000 hrs local
on 147.360 MHz (+) Tone=110.9

SEPARS Net

Tuesday at 19:30 hrs local
on 147.360 MHz (+) Tone=110.9

Announcements & News

SEPARS Monthly Workshop
Third Thursday, 1900-2130 local
14923-64th Ave, next to Firehall #9, Surrey.

SEPARS Training

Fourth Saturday, 0830 local,
Firehall #1, 88 & 132nd Street,
Surrey

On the Web ve7sar.net

Between newsletters, watch your e-mail for announcements of events, monthly meetings and training opportunities. These announcements can also be found on our web page, or via:

Twitter
[@ve7sar](https://twitter.com/ve7sar)

Photos
Web Albums



HAMNation

NOW ON WEDNESDAY!

TWIT (This Week in Technology) presents a weekly HD video webcast about Ham Radio.

Hosted by Leo Laporte W6TWT, Bob Heil K9EID, and Gordon West WB6NOA with George Thomas W5JDX covering 'Smoke and Solder'.

Recorded live each Wednesday night 8 PM CDT at live.twit.tv
All programs archived at twit.tv/ha

Join us each Wednesday and don't miss seeing the first episode with special guest Joe Walsh WB6ACU, who wrote and plays the theme music for HAMNation.

Help us spread the word about HAMNation.

Next Meeting...

Getting Started In HF



Feb. 12th Meeting—An HF Primer

Several of our members have expressed a desire to get started on HF but feel they need some pointers in the right direction. Our program for the Feb 12th meeting will be to show that it does not have to be difficult or expensive to get an HF station on the air. Whether your interest is CW or SSB or digital modes, the basic setup is the same and once you are actually hearing signals on your radio, the enhancements can be added with help from more experienced members if needed. The topics will be broken down and presented by qualified members that together, have many years' of HF activity under their belts. This is strictly an introductory session on HF and you will be encouraged to get started with the basics then pursue your specific interest or mode. Here is what will be covered:

- Why should you be interested in HF?
- The fundamental components of an HF station
- Power supplies, connectors and cabling
- Options for limited space antennas and antennas for restricted areas, such as stratas and home owner associations
- Coax options and connectors
- Where and when to find the contacts

Even if you are an experienced HF operator, we encourage you to come out, share your knowledge and help with answering questions.



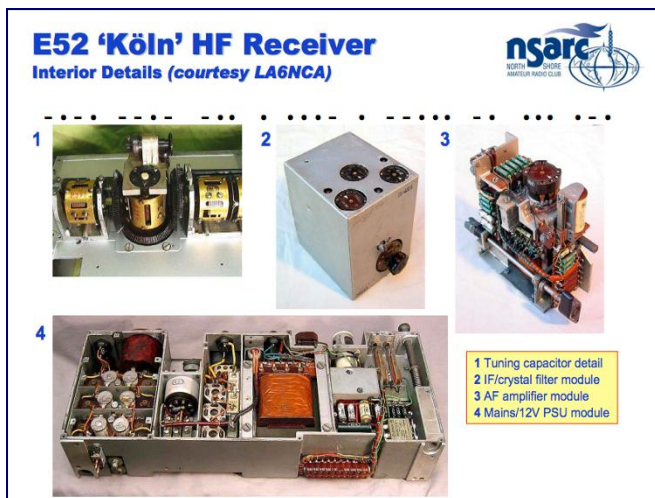
An example of a multi-band HF antenna suitable for restricted areas, stratas or an apartment balcony. This Hi-Q antenna is mounted on a bicycle rack and is capable of worldwide operation.

SARC Contest Calendar for 2014

Dates	Contest	Modes
Feb 1-2	BC QSO Party	SSB, RTTY & CW
Feb 8-9	CQ WW WPX Contest	RTTY
Feb 22-23	North American QSO Party	RTTY
Mar 29-30	CQ WW WPX Contest	SSB
May 24-25	CQ WW WPX Contest	CW
June 28-29	ARRL Field Day	

...Last Meeting

German WWII Radio



Adam Farson of the North Shore Amateur Radio Club presented a fascinating talk on German radio technology as used in the Second World War.

Missed it? Check out his presentation [here](#) on the SARC website.

For Sale

Kenwood D-710A mobile, brand new in box,
never used \$500.00 Contact
John Horahan VA7DFA

Call 604-318-4704

Or email: johnhorahan@gmail.com

Expecting QSL Cards?

Are you expecting QSL cards via the in-coming bureau? If so, and you are a regular attendee at the Friday morning SARC breakfast you can pick them up there.

Alternatively if you may arrange to collect them at SARC monthly meetings. All you have to do is advise QSL Bureau Manager, Ken Clarke VE7BC, that one or the other is your choice of pickup location. Ken can be reached at: kenjclarke@shaw.ca or ve7bc@gmail.com



The Contest Contender

Fred Orsetti VE7IO

The RAC Winter Contest and More

The objective this year was to do better than last year and we achieved our goal. Last year's score was a respectable 433,752 points and this year we scored 655,016 or 51% better.

The contest started on Friday at 4:00pm local time. Unfortunately John VA7AXU, who was on the first shift, came down with laryngitis so he was unable to make the contest. With some quick work by Brett, VE7GM, on the phone, he was able to get Nelson VE7NAE to fill in and Nelson arrived at 5:30pm on Friday. Once on 40 meters SSB Nelson was able to run a good rate and we had VE7RAC on the air. When Nelson left we were mainly a CW operation until Al, VE7WJ, arrived to operate 80 SSB on the overnight shift. Al managed to work 10 sections and 101 Q's on 80 SSB for a good mult count.



At this point we had worked many more CW Q's than SSB and this carried on until around 11:00am on Saturday when John, VE7TI, arrived to operate phone. John started on 10

meters and immediately had a pileup and was running in excess of 3 per minute - WOW! When 10 started to drop off John moved to 20 meters around 14.175 MHz and again the pileups happened. This was most likely a result of VE7RAC showing up on these bands on SSB and we were fresh meat as the saying goes. Around 3:00pm John moved to 14.230 MHz, into US general class territory and again more pileups. Meanwhile John, VA7XB, on the other radio continued on logging CW Q's on 15 and 40 meters at a very good rate.

Late Saturday afternoon Stan, VA7NF, suggested we could add something like 5000 points to our score if we worked one VHF FM Q as we already had a significant number of mults. We quickly fired up the IC 2820 and called CQ on 146.52 and we worked VE7NSR, logged them and bingo we had our mult on VHF. We could have done the same with



6 meters but the only 6 meter antenna was on the SteppIR and it was fully in use. This is something to remember when planning the next contest. Note the score chart.

The strategy of minimizing VE7RAC on SSB for the first part of the contest was not planned but it did lay the groundwork for a very active Saturday afternoon.

We operated 21 of the 24 hours missing a few hours between 2:30am and 5:30am however we were on the air with VE7RAC for most of the contest. This is important when using a special call as one of the objectives is to have the bonus call available for the full contest on both modes. Using a bonus point call is fun mainly because you are the hunted making the activity level much higher than normal.



I want to thank ALL the operators who made the Winter RAC contest a success and for me it was great to see the operators achieve a very good rate. Thanks to Jim, VE7FO, who, once again, was here to guide us throughout contest period.

The Stats

Call Sign Used VA7RAC

ARRL Section : BC

Club/Team : ORCA DX and Contest Club

Software : N1MM Logger V13.12.2

Band	Mode	QSOs		Pts
3.5	CW	141	728	9
3.5	LSB	101	684	10
7	CW	105	560	8
7	LSB	181	724	9
14	CW	209	820	9
14	USB	229	1104	11
21	CW	410	1678	11
21	USB	16	40	1
28	CW	100	502	7
28	USB	264	1138	6
144	FM	1	10	1
Total Both		1757	7988	82

Score : 655,016

Operating time 21 hrs.

Operators: VA7NF, VA7XB, VE7CYY, VE7FO, VE7GM, VE7IO, VE7KC, VE7NAE, VE7TI

Our current standing on 3830 is below.

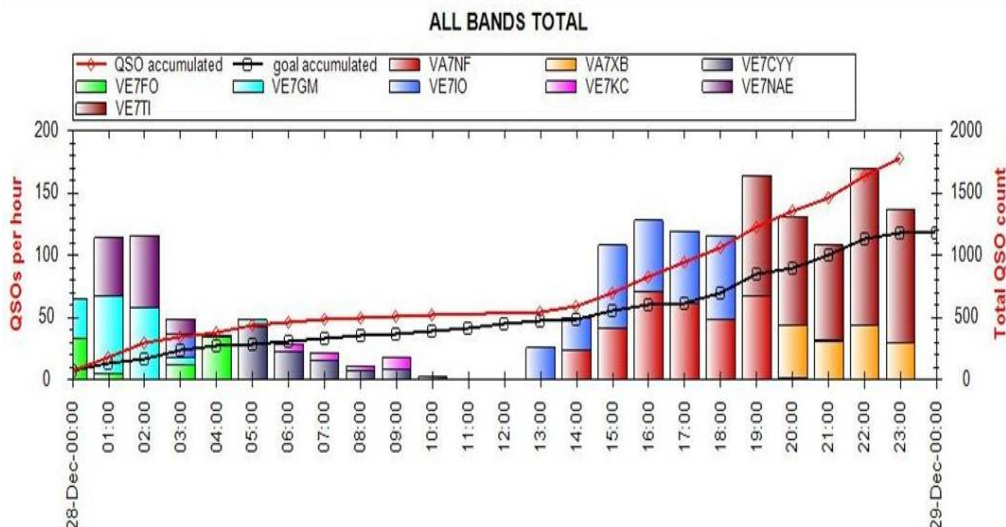


Photo of Anton VE7SSD looking very satisfied after working V5/DL9NDS (Namibia) in RTTY Roundup.

VE7SAR Statistics for the RTTY Roundup contest:

Band	QSOs
7	25
14	142
21	153
28	27
Total	347 QSOs for a claimed score of 26,025

Call	CW	Ph	CW	Ph Mults	Op Time	Score	Club
VE6RAC(@VE6JY)	2377	3019	63	62	24	2,899,250	
VA2RAC	805	1177	53	45		949,620	CG Que
VE7RAC(@VE7IO)	965	792	44	38	21	655,016	Orca DXCC
AA3B	1077	0	49	0	14	220,794	FRC
VE1DT	344	0	24	0	9	46,800	MCC
W1UJ	112	0	19	0	2	14,364	BARNSTORMERS



Here are the stats of our performance this year vs 2012. The black line is last year's score and the red line is this year's score. As you can see we had more QSO's but we also had more mults. Next year will be a challenge for sure.



SEPAR Report

Fred Orsetti VE7IO

A Successful Exercise



An exercise managed by the Cross Border Communications Group (CBCG) was carried out on Saturday January 11th and covered a wide geographical area from Alaska to California. The exercise objective was to determine if amateur radio communications could be established between hospitals on both sides of the border.



The Surrey Memorial Hospital Team



The Peace Arch Hospital Team

SEPARS operators, using Fraser Health (FH) grab and go kits, handled the communications at Surrey Memorial (SMH) and Peace Arch hospitals (PAH) using digital communications between Hospitals and net control stations. RMS Express and Winlink were used (*see the article on page 11 -Ed.*). Stations were required to check into net control using several different VHF and UHF voice repeaters as well as digital. Both hospitals, PAH and SMH had no problems connecting with a variety of Winlink nodes however the FH grab and go kits are VHF only and one of the main net frequencies was UHF. To get around this restriction Net check-in was done on a secondary VHF frequency somewhat unsatisfactorily.

Reports from both sites were sent to the CBCG managers to be compiled into a complete overview of the exercise. This should be available in the near future.

Training for the upcoming ESS exercise has begun under the direction of Peter Gauld, VE7PGX. Peter has Sections on NTS message preparation and handling, message clerk responsibilities and station management are the main components. Peter has organized both hands on as well as table top sessions.

An MFJ screwdriver antenna controller has been installed at the EOC radio room. This has provided a much needed improvement to the HF operation. The same controller will be installed in the communications trailer shortly.

Production of the SEPARS promotional video is progressing now that all sections of video and audio have been completed. The video will be included along with written presentations to form a promotional package that will be used to develop a sponsorship program. The objective is to raise much needed funds for SEPARS as well as promote our ability to provide emergency communications within the community.

SEPAR Meetings

Third Thursday of each month starting at 1900 hrs

Fourth Saturday of each month starting at 0900 hrs

Location and event schedule can be found at separ.shutterfly.com — click on the calendar tab

SEPARS maintains a users group site where current information can be found on out activities as well as information on future events. If you are not a member of the SEPARS users group give it a look and sign up. The site has not been to active recently but as spring and summer approach there will be much more information on SEPARS activities available. Log onto the SEPARS website at www.separs.net and select the “[Events Page](#)” or go there directly.

Once there you will be in the Shutterfly site and this is where you sign up for the users group. You will need to register before you can enter the member only areas. Remember we are also on Twitter as [@VE7HME](#)

SEPARS’ strength is in its members and their contributions. Lorraine Wilson, at Surrey Fire Hall #1, maintains the volunteer list where you can check the current status of your membership in SEPARS. Please take a minute to contact Lorraine, her contact information is at the bottom of the website page and at the end of this article.

There are a number of outdoor and training activities in which SEPARS members can participate so think about your skills in emergency communications and how you can serve in your community and the City of Surrey. Help provide emergency communications training for other SEPARS members, it can be very rewarding.

~ Fred VE7IO

Sign-in or
Sign-up
Here



Emergency Program Administrative Coordinator

Lorraine Wilson

SurreyEmergencyProgram@surrey.ca

604.543.6795

Build a Radio in Less Than One Minute

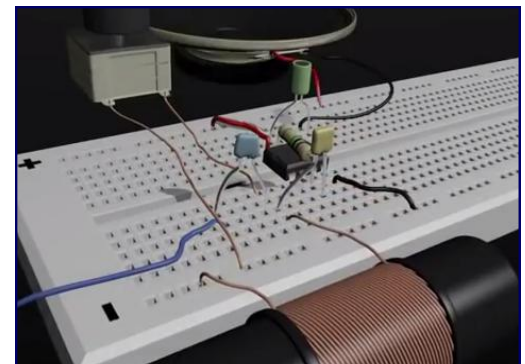
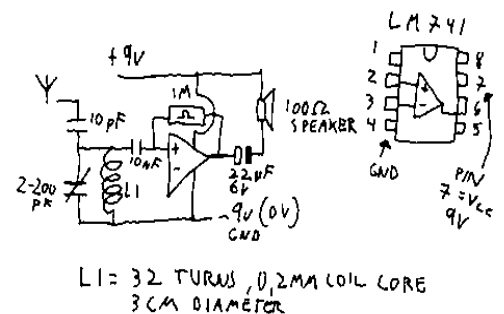
Due to the numerous requests from his Build-a-radio-in-5-minutes, radio amateur Tommy Helgevold OZ4KID decided to make a better video with explanations on how to make a radio.

He also decided to beat his old challenge as well...

There's even a schematic in the end of the video and an animated version of the entire breadboard setup.

Watch Build a radio in less than one minute

http://www.youtube.com/watch?feature=player_embedded&v=3Zzmi_Kno4w



The diagram provided is a bit crude
but here is a radio on a chip.



Radio-Active

Jinty Reid VA7JMR

Introducing Bob Buckland VE7FWZ

It was in 1936 at Vancouver General Hospital that Bob made his first HF communication as he announced his arrival into this world. He was the only child in his family and was raised largely in Vancouver where he attended the Simon Fraser Public School. When he was in Grade 9 he moved with his family to White Rock where he attended and later graduated from Semiahmoo High School in 1955. He then went on to study at the Vancouver Vocational Institute, graduating as a draughtsman. His first full time job was working for a Structural Engineering Company in his chosen profession. In 1954 he had met his future wife, Eileen, and they married in 1956.

They built a home in South Surrey and had 3 children, 2 girls and 1 boy; Kathie, who works for a security agency, lives in Fort St James, Barb is a nurse at Langley Hospital and Jim is a concrete finisher in Cloverdale. Bob and Eileen have 4 grandchildren and 8 great grandchildren. After having their children Eileen supported Bob going back to school and he attended BCIT graduating second in his class with honours and 2 scholarships in architectural technology. He went to work for Erickson Massey Architects for only 4 months before moving on to work for the City of New Westminster in 1969 where he remained until retiring in 1995.

It was after leaving BCIT, that Bob developed a paralyzing disease and ended up spending 6 months in the Peace Arch Hospital and then 6 months in the GF Strong facility in rehabilitation. Bob stated that money was tight during this time and his resilient wife went to work in the Dietary department of the Peach Arch Hospital to supplement the family income.



After retiring at the age of 60, Bob returned to working as a holiday replacement for the Cariboo District. He and Eileen loved the lifestyle and the people in that area which is why they have a cabin there that

has provided many pleasant memories for their family over the past 40 years. They also enjoyed travelling in their motor home across Canada.

Over the years they have had 9 dogs and the present one is a part Beagle dog, who they have named Cabot. Cabot was a rescue dog and was already 13 when they adopted him. Cabot is now 16 years old and enjoys his special place in front of the fireplace.



When asked to describe her husband's personality Eileen stated that Bob has a dry sense of humour, a keen sense of right and wrong and a fantastic memory for dates. There are still a few things that Bob would like to do, his "bucket list" as Eileen calls it. He would like to visit Alaska and the Southern States and take a course in Public Speaking, a future presenter for SARC perhaps?

Bob has always been fascinated about radio and he remembers getting a crystal kit when he was only 7 or 8 years old. In 1985 he joined SARC and in 1986 he qualified for a Certificate in Amateur Radio and in 1987 his Advanced Certificate. At that time Morse code was required for both certifications at 10 and words per minute. His first radio was a Yaesu FT 101. For 2 years Bob was Net Control on the SARC weekly net. During his time with SARC he has served as treasurer, secretary and president.

His favourite ham radio activities are "rag chewing" and CW. Bob now has his own radio shack which operates off BC Hydro power or on site back up power and his present HF rig is a Kenwood 440. He has recently installed an antenna next to his house. Eileen also is a licensed ham since 1993 when she graduated top of her class with a 98% score. Her call sign is VE7IRK but she states that she is not very active. Eileen and Bob have been married for 57 years which nowadays is a great accomplishment. Thank you Bob for all your service over the years to the Surrey Amateur Radio Club.



The SARC Calendar ...places to be in Surrey for Amateur Radio in the month ahead

February 2014						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	1
	For details on all SARC events, go to ve7sar.net For details on all SEPARS events, go to separ.shutterfly.com/calendar				Weekly SARC Breakfast 8:00 Kalmar Family Restaurant 81 st & King George Blvd.	Contest: BC QSO Party (SSB & CW)
2 CPR Course	3	4 SEPAR NET 7:30 SARC NET 8:00	5	6	7 Weekly SARC Breakfast 8:00	8 Contest: CQ WW WPX (RTTY)
9 Contest: CQ WW WPX (RTTY)	10	11 SEPAR NET 7:30 SARC NET 8:00	12 SARC General Meeting	13	14 Weekly SARC Breakfast 8:00	15 Contest: ARRL International DX Contest (CW)
16 Contest: ARRL International DX Contest (CW)	17	18 SEPAR NET 7:30 SARC NET 8:00	19 SARC Exec Meeting	20	21 Weekly SARC Breakfast 8:00	22 Contest: NA QSO Party (RTTY)
23 Burnaby ARC Swap Meet	24	25 SEPAR NET 7:30 SARC NET 8:00	26 SARC Executive Meeting	27	28 Weekly SARC Breakfast 8:00	1

Contest Details: <http://hornucopia.com/contestcal/contestcal.html>



QRM

...from the Editor's shack

*Do you have a photo or bit of club news to share?
Something to sell or something you are looking for?
Email it to SARCcommunicator@outlook.com for inclusion in this column.*

Welcome to a New Surrey Ham

I'm an Italian OM just moved to Surrey.

Actually I'm using my Italian callsign /portable (IZ7FMM/VE7) and some time my US callsign KF7CCM/VE7 just for 10m band.

I am very passionate about the design and construction of antennas for HF and VHF, using modeling software such as MMANA and 4nec2 .

I like to contest, in fact I was the principal planner and organizer of the contest stations in my section in Italy, mainly concerning the planning and building of all the antenna systems.

I also design and build antennas for DXpedition and IOTA, using fibreglass and copper wire. I have made personal variants of spiderbeams, much lighter and faster to install, both single and multi -band, VDA array multibands single- loop, multi-band end-fed verticals etc.

Currently I 'm very passionate about SDR radio, in fact in Italy I built an SDR-IF board for my FT-950 and a Softrock to use remotely.

I have brought with me just a little bit of equipment, such as the antenna analyzer, digital LC meter, and some electrical components, but I would like to buy an oscilloscope and an RF generator because the ones I had in Italy were too large to transport to Canada.

I hope to meet you soon and to contribute to the amateur radio community of Surrey.

Best regards,

Alessandro Danese
IZ7FMM - KF7CCM

Burnaby Amateur Radio Club Swap Meet

The 2014 Swap Meet is Sunday, February 23rd at the Queensborough Community Centre in New Westminster from 10:00am until 1:00pm.

<http://ve7bar.org/swap-meet/>

General Admission: \$6 (children 12 and under are free)

Vendor Tables: \$25

To reserve a Vendor Table please contact Lou, VE7CGE at loucge@telus.net or club@ve7bar

Vendor Payments

After you have received confirmation of your table reservation you can use PayPal to submit your payment. Table and helper quantities can be specified when you view your PayPal cart.

Basic Amateur Radio Course

The Delta Amateur Radio Society's Basic Amateur Radio Course will be starting on Tuesday, April 1. Course fee is \$65 with an early bird special of \$50 till March 23, 2014. All details about the course and how to register can be found at: <http://deltaamateurradio.com/>





Page 13—News You Can Lose

The Lighter Side of Amateur Radio

Vacuum Tubes Are Back (or did they ever go away)?

While walking through a local ‘big box’ store I notice the glow of a stereo on display. Intrigued I took a closer look and, sure enough, there were two vacuum tubes. Reading the information on the display, I learned that this is a [Samsung](#) home stereo receiver/amplifier that uses vacuum tubes in the audio output



stage, one for each channel. Now tubes are not unusual in high powered commercial audio equipment because of the high output power but according to Samsung this one has:

“Full-bodied harmonies that envelop your ears. A wave of sound so life-like, you feel like you’re in the recording studio. It’s the combination of analog and digital, and we’ve set the stage for its comeback.”

For effect (I guess) they put a window on the top of the unit so you can see the warm glow of the tubes.

Everything old is new again.



Do You Remember?

Nixie's Are Resurging In Popularity

Citing dissatisfaction with the aesthetics of modern digital displays and a nostalgic fondness for the styling of obsolete technology, significant numbers of electronics enthusiasts in recent years have shown interest in reviving Nixies. Unsold tubes that have been sitting in warehouses for decades are being brought out and used, the most common application being in homemade digital clocks. This is somewhat ironic, since during their heyday, Nixies were generally considered too expensive for use in mass-market consumer goods such as clocks. This recent surge in demand has caused prices to rise significantly, particularly for large tubes. The largest Nixie tube known to be in the hands of collectors, the Rodan CD47/GR-414 (220 mm [8.7 in] tall), have been sold for hundreds of dollars each, but said Nixies are extremely rare and only found in a few places of the world by sedulous and lucky seekers. Prices for other large Nixies displaying digits over 25 mm (1 in) tall have risen by double, triple or more between 1998 and 2005.

In addition to the tube itself, another important consideration is the relatively high-voltage circuitry necessary to drive the tube. The original 7400 series drivers integrated circuits such as the 74141 BCD decoder driver (or its Russian equivalent the K155ID1) have long since been out of production and are rarer than NOS tubes. However modern bipolar transistors with high voltage ratings are now available cheaply, such as MPSA92 or MPSA42 - an unusual example where an original IC design has been replaced by discrete transistors. The orange glow of a Nixie in operation inspired the color scheme of the popular Mozilla Firefox web browser.





Nauticapedia

John M. MacFarlane VA7PX

The Marine Amateur Radio Flag



There is an interesting flag to be seen flying above the waters of the Pacific Northwest and over many oceans of the world. It identifies the waterborne amateur radio operators in much the same way as the call letter license plates identify the motoring ham ashore. I conceived and designed it and it was first offered to members of the British Columbia Amateur Radio Boaters Net.

The idea of the boaters flag caught on immediately and requests for the flag came from far and wide. To date it is flying in 15 countries of the world 33 U.S. States and nine Canadian provinces. So far over 650 flags have been sent to marine amateurs from the east coast of the U.S. Baja Mexico, the South Pacific, Australia and New Zealand and the Mediterranean.

The flag is unique in the world and readily recognizable. Flown from the mast of a ship, it quickly identifies the presence of an on-board ham.



This amateur radio flag was flown aboard H.M.C.S. Haida during the time when the ship had an active amateur radio station aboard. (Photo from the Drinkwater collection)

Ham radio, as it is usually called, gradually developed into a worldwide hobby and allowed operators around the world to establish contact. As equipment improved voice communication became possible, compact transceivers were installed on yachts and Marine Amateur Radio became very popular. The use of Very High Frequency (VHF) radios and linked repeater stations greatly increased the range of communications. In the 1990s when I designed the Marine Amateur Radio Flag there

were dozens of boats calling in to the VHF British Columbia Boaters Net held each summer afternoon at 5 pm. The Net is a meeting place for boats cruising coastal waters from Washington State to areas beyond northern Vancouver Island via, linked repeaters. With the increase in Cell Phone coverage most of the inner south coast the interest in Ham radio has diminished. Today there might be a dozen or so still taking advantage of the Boater's Net but I doubt if there are any vessels still flying the Marine Amateur Radio Flag.



This used to be the QSL card sent out by VE3CGJ while it was an active station. (Photo from the Drinkwater collection)

The flag signifies that there is an amateur radio station on board. When it is operated, it brings on-air attention to the vessel and her purpose.

Amateur radio stations successfully contacting the station on board HMCS Haida received a confirmation of the exchange afterwards as a souvenir. Parks Canada permits a special events station once or twice a year. Any confirmation certificate developed for a special event is the responsibility of the sponsor for the special event. VE3CGJ is the current call sign for H.M.C.S. Haida and Jerry Proc is the current licence holder.

Credits: Drinkwater, Ron (2014) The Marine Amateur Radio Flag. Nauticapedia.ca2014.

http://nauticapedia.ca/Articles/Flag_Amateur_Radio.php

Digital Messaging

Winlink



Digital messaging has no equal in terms of the volume of traffic that can be passed on a per message basis. Winlink 2000 is a worldwide radio messaging system that takes advantage of the Internet wherever possible while retaining the ability to function without major parts of it. It combines the best attributes of wireless communications and the internet to allow remote users to send and receive email to and from correspondents on the internet as well as other users of the system. The synergy of this combination provides fast internet message forwarding worldwide with the long reach of radio links to places without normal internet service. The system is carefully designed to provide important side benefits:

- To operate without the internet over major portions of the earth.
- To minimize the spectral and temporal footprint of signals needed to accomplish the task.

As a result, the system is uniquely suited for emergency communications when other wireline and infrastructure systems are inoperative, and for users in vast places where there is no infrastructure at all. Especially where the system is supported on the amateur radio bands, it allows efficient use of the crowded spectrum by not requiring spectrum or radio infrastructure for long-distance message forwarding.

Growth of the system is a function of the various classes of users. These include Amateur Radio hobbyists, emergency communications organizations such as the American Radio Relay League (ARRL) ARES® (Amateur Radio Emergency Service) and RACES (Radio Amateur Civil Emergency Service), the UK Cadet forces, Army, Navy/Marine Corps, and Air Force Military Auxiliary Radio Service MARS branches, State governments, Federal agencies, and many others worldwide. One Federal Agency had 72 locations and 5 RMS gateway stations. Institutional use outside the US grows more slowly, but organizations in the Netherlands and the United Kingdom have adopted the system as of 2011.

Winlink 2000 has been assisting the maritime community, NOAA, the United Nations, the US Coast Guard and other agencies since 2000. Only recently has it been brought to the attention of the greater emergency management community due to major domestic

disasters. The system is used continuously by maritime users. To locate lost and overdue vessels, the US Coast Guard frequently requests the assistance of over 7,500 Winlink users who are at sea, and positive results are very common. In addition, during the Asian Christmas Tsunami, maritime users played an important role in communications in the aftermath. This was also true of the Chilean/Peruvian storms, the failure of INTEL SAT 804--which left hundreds of Islands without reliable communications--and many other hurricane-related episodes in the Caribbean and Atlantic. Such acts went unnoticed until the domestic weather disasters brought Winlink 2000 to the attention of many, including a positive mention in post-Katrina reports from the US House of Representatives and the White House.

The Department of Homeland Security suggested to an ARRL President that the Amateur community should design and maintain a national digital network for emergency communications purposes. Winlink 2000 was their network of choice. Since 2005, the ARRL ARES® and Radio Amateur Civil Emergency Service (RACES) have been busy deploying Winlink 2000 stations county-by-county across the country. Non-Amateur volunteer services and NGOs such as MARS and the UK Cadet Forces, the International Health Service, the Salvation Army, the GA Baptist Relief organization, have used Winlink 2000 for radio e-mail, both in emergencies and when no other communications outlets have been available. If there is a disaster in the US, it will certainly involve Winlink 2000 as a emergency communications tool at some point.

RMS (Radio Mail Server) gateway stations are radio stations to which users connect. They are numerous, located worldwide, and supported by volunteer operators, government, or non-government organizations. Each is connected to the internet. Because Winlink 2000 uses the de facto e-mail standard (IETF RFC 2821), it provides radio users and internet users seamless, transparent e-mail with attachments of reasonable size without the need for additional training or learning. It is just plain e-mail. This allows any mobile or portable operation to interface into the internet e-mail system from anywhere on the globe that a radio connection can be made. With few exceptions, this is global coverage. It does not matter which RMS gateway station is contacted by radio.

Don't know how well known this is to the Club membership. It's a year-long operating event anchored by W1AW handing out QSOs from every state and some territories. Every week it's two different states. Last week it was North Carolina and West Virginia. This week it's South Carolina and Utah. They typically have several bands activated at the same time and they're generating massive pileups. If you miss some states they do it all again in the 2nd half of the year.

They're easy to find, just check out the spotting network. Some members may need to be told how to do this. Any members working towards WAS would be particularly interested in this. It's not often that, say, North Dakota is on several bands and modes at the same time for an entire week! Op trainees would also get great practice in competing in pile-ups.

Haven't tried it yet, but would also provide an excellent test of CW Skimmer's usefulness in unwrapping pile-ups. This isn't just about working W1AW. There is another component involving hams working each other. Some QSOs are worth more points than others. QSOs with me are worth 100 points!

Details at <http://www.arrl.org/centennial-qso-party>

73, Jim VE7FO



RAC News

Radio Amateurs of Canada

IARU President and RAC member appointed Queen Counsel

2014-01-06

The province of Alberta announced on December 31st, that Mr. Timothy S. Ellam, VE6SH was one of the lawyers appointed to the province's Queen Council status. Mr. Ellam is the current IARU President and has been a member of Radio Amateurs Canada for several years.

RAC President Geoff Bawden, VE4BAW on behalf of all members and amateurs in Canada, extends his sincere congratulations to Tim Ellam for this prestigious appointment.

The official Alberta Government announcement can be found here:

<http://alberta.ca/release.cfm?xID=35624E35AE74D-B656-6B78-FBB2D96CAC768F80>

Vincent Charron, VA3GX/VE2HHH Director of Communications and Fundraising - Radio Amateurs of Canada. Email: communications@rac.ca

60m Frequency Allocations Approved

2014-01-22

RADIO AMATEURS OF CANADA Radio Amateurs of Canada applauds 60 meter band frequency allocations!

Industry Canada has announced that a number of specific frequencies within the 60 meter high frequency band have been approved for amateur radio use as RAC advocated.

A total of five specific frequencies within the 5 MHz band have been allocated, 5332 kHz, 5348 kHz, 5358.5 kHz, 5373 kHz and 5405 kHz. Radio amateurs across Canada have new frequencies to explore as a result of a recent decision of Industry Canada.

"Canada has joined a number of countries in making channels available in the 60 metre band, near 5MHz for use by radio amateurs. This will provide increased ability for Canadian radio amateurs to help out in providing emergency communications when existing systems fail as has happened in ice storms and flooding. We applaud this decision of the Canadian government." said Geoff Bawden, President of Radio Amateurs of Canada.

Unlike the commercial communications systems so important to modern society, amateur radio does not require an extensive infrastructure for communications. Radio amateurs take advantage of natural phenomena to send their signals across town and around the world. They delight in being able to set up in a remote location with their own power supplies and simple antennas, often home built, competing to see who can make the most contacts in a limited time. The Amateur Radio Emergency Service in Canada, sponsored by RAC, provides training and organizes exercises for radio amateurs to sharpen their skills to be able to respond to emergencies. As well these organizations and amateur radio clubs often provide communications to community public service activities and events such as ski races and marathons, bicycle races and car rallies. The skills radio amateurs develop through their hobby and these activities mean that in emergencies that shut down power grids, internet and wireless communications, amateur radio can continue to function. In major emergencies such as the earthquake and tsunami in Japan in 2011 and the Typhoon Haiyan in the Philippines last year amateur radio operators are often the first source of information from affected areas.

The key resource for amateur radio is access to the radio spectrum. Conditions in the atmosphere and high in the ionosphere determine the distances over which communications are possible. The new allocation at 60m between existing allocations at 80 m and 40m should make regional communications more reliable. Furthermore as Canada and the United States have allocated many of the same channels to their radio amateurs cross border communications are possible. Fortunately major emergencies are relatively rare. Radio amateurs will explore communications on the new frequencies as they do in all available bands, experimenting, learning and making new friends across the world.

TECH DETAILS

The five 60 metre channel allocations are the same as authorized in the USA, with the same power restriction of 100 watts ERP (relative to a dipole antenna). Transmissions, independent of emission mode, must be centered on the each of the following frequencies: 5.332, 5.348, 5.3585, 5.373, and 5.405 MHz with a maximum

allowable channel bandwidth of 2.8 kHz. When operating SSB, upper sideband will be the convention to follow on the 60 metre band. Other modes that are permissible will be CW, Data (including PSK 31 and Pactor III), and RTTY. With this latest authorization on operation on the 5 MHz channels to Canadian Amateurs with HF privileges, there will no longer be a requirement to operate under a special "Developmental" license and VX9 call sign. Holders of such licences can now let them lapse.

Canadian amateurs should refer to the posting of RBR-4, Issue 2, for all details before proceeding to operate on the new 60 metre channels:

<http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10650.html>

Their curiosity and eagerness to develop and share this hobby will enrich the communities where they operate and provide needed resilience in communications when emergencies require it.

Technical details of this decision can be found here at the [IC document](#).

Did You Know We Have A Patron Saint? St. Maximilian Maria Kolbe (SP3RN)

January 8th was the birthday of St. Maximilian Maria Kolbe (SP3RN), Patron Saint of amateur radio operators. To mark that date, as well as the 75th Anniversary of the Radio Niepokalanów founded by St. Maximilian, several special-event stations operated from Poland and Italy.



Twin stations: 3Z120SMK and I12SMK were active from Kraków and Varese, respectively, on 8-28 January 2014. Other memorial stations: HF120MK SN120MK SNOMMK SN120MMK and HF0RN SNORN SN75RN will be on the air from 8 January to 14 August 2014. A Polish and an Italian Award were awarded for working the special-event and other associated stations.

Father Maximilian was fascinated by mass media in the 1920's and 1930's. He established large printing plants in Poland and Japan for his Franciscan Order publications. When he was on a mission to Japan (as well as China and India), he got acquainted with broadcasting and amateur-radio stations. That medium could reach those who were unable to read in those years.

Upon arrival back in Poland, he applied for a broadcasting license. The radio was a strategic medium in the 1930's and only the Polish Radio (1925) and a military radio station were permitted to broadcast. Besides, the amateur radio movement was thriving in Poland; clubs were already established in Lvov, Warsaw, Poznan, Kraków, Lodz and other cities.

Father Maximilian was permitted to broadcast test transmissions close to the 40m amateur radio band in 1938. His interest in amateur radio has been confirmed by quotations from his writings. He chose the SP3RN callsign for his test transmissions (spelt in Polish: Stacja Polska 3 Radio Niepokalanów).

Father Maximilian was murdered in the German Nazi Auschwitz Concentration Camp after he had volunteered his life for the life of another inmate, randomly selected for execution.

Beatified by Pope Paul VI on 17.10.1971. Canonized as St. Maximilian Apostle of Consecration to Mary and declared Martyr of Charity by Pope John Paul II on 10.10.1982.

Considered a Patron of journalists, families, prisoners, the pro-life movement and the chemically addicted. Patron Saint of amateur radio operators.

~Henry SP9JPA



He is the only canonized saint to have held an amateur radio license, with the call sign SP3RN

Knots are used frequently in our hobby. From securing loads to securing antennas, a knowledge of some basic knots is very valuable. We are considering a General Meeting session later in the season to see some knots and their application demonstrated. In the meantime, we'll feature some common knots for you to practice. This month...

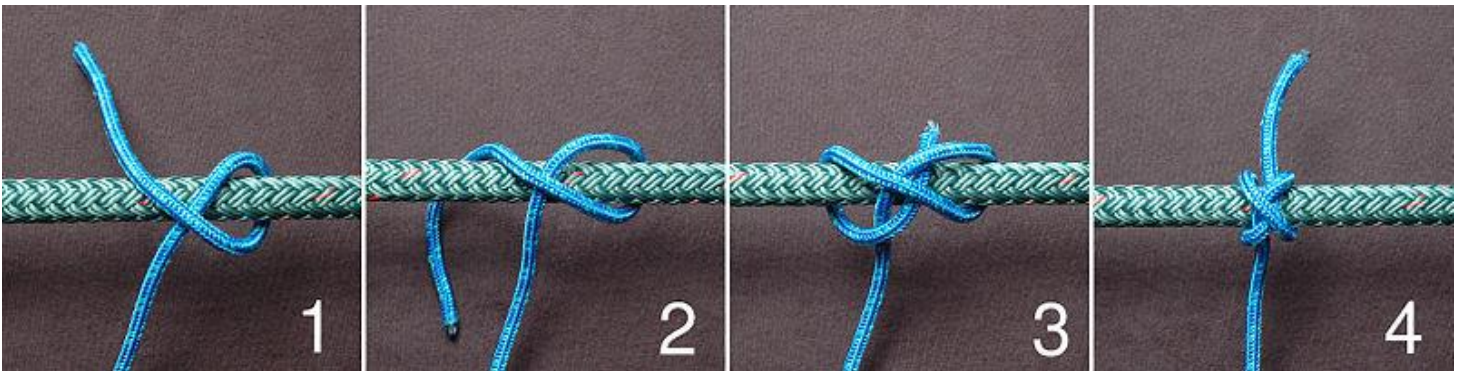
The Constrictor Knot

Use this knot to bind ropes, as clamps, or as cable ties.

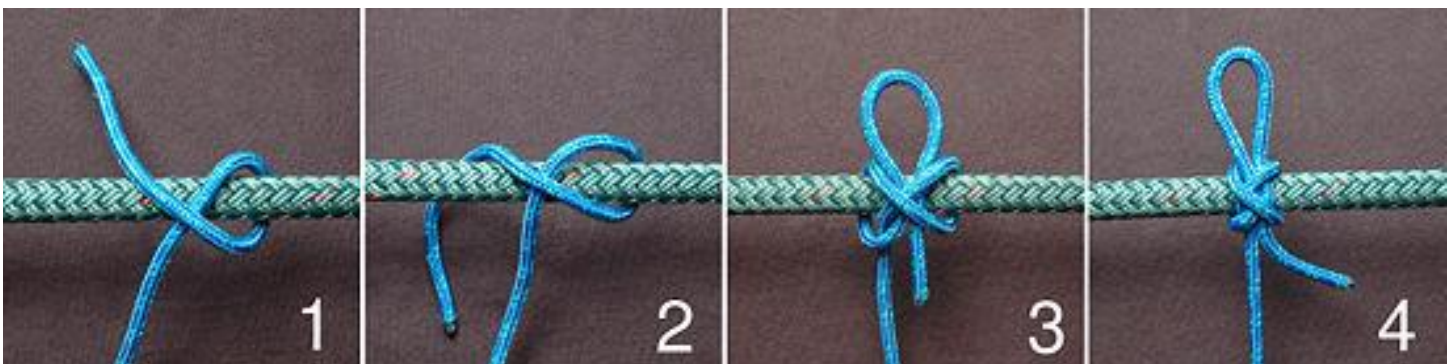
The constrictor knot is appropriate for situations where secure temporary or semi-permanent binding is needed. Made with string or twine it is especially effective, as the binding force is concentrated over a smaller area. When tying over soft material such as the neck of a bag, hard stiff cord is more effective. When tying over hard surfaces, soft stretchy line is preferred. The constrictor knot's severe bite (which makes it so effective) can damage or disfigure items it is tied around. To exert extreme tension on the knot without injuring the hands, one can fashion handles using marlinespike hitches made around two rods.

Constrictor knots can be used for temporarily binding the fibres of a rope (or strand ends) together while splicing, or when cutting to length and before properly whipping the ends. Constrictor knots can also be quite effective as improvised hose clamps or cable ties. Noted master-rigger Brion Toss says of the constrictor: "To know the knot is to constantly find uses for it

Single Constrictor Knot



Double Constrictor Knot





Happening Now

BC QSO Party

We hope everyone who plans to get on the air remembers that the event is coming up very soon: 1600z Feb 1 to 0400z Feb 2... right about now?

The QSO party is a low-stress entry point to HF and a perfect opportunity to ask basic questions. Q potential is HUGE for BC stations, especially if operators call CQ. In the past few years, BCQP has attracted a lot more attention in BC, the rest of Canada and beyond. The event appears on calendars and is included in radio-related bulletins, newsletters and news feeds with a national and global reach.

We can all take advantage of the on-air activity generated by coinciding QSO parties in Minnesota, Vermont and Delaware, as well as the 10-10 Winter SSB contest and the Freeze Your Butt Off Field Day in Arizona. Trading Qs with stations in the host states not only builds a bigger log but also keeps the bands buzzing, which creates more Q potential. Greater awareness of BCQP makes Q-trading a lot easier than it used to be. But don't forget the rest of BC. There should be a significant number of VE7/VA7s on the air all over the province.

There are lots of resources on the BCQP section of the Orca DXCC website, including examples of how to trade Qs, an at-a-glance summary of same-day events and respective exchanges (good if anyone is planning to try trading Qs) and a multi-party log sheet, as well multiplier lists. Go to <http://www.orcadxccc.org/bcqp.html>

This year, seven plaques are being sponsored. The ones applicable to BC stations are Top BC, Top YL, Most Federal Electoral Districts Worked and Top Rookie (new). Note: In the rookie category, it will be essential that

rookies specify their status in the email sent with log submission.

Additionally, top scores by stations in BC in all entry classes are eligible for lovely, photo-based certificates. Different every year and definitely worthy of the shack wall.

With regard to logging software, BCQP is fully supported by N1MM logging software and CQ/X GPS-enabled software for mobile contesting. Other programs have generic QSO party options, but all software really needs the computer and radio to be interfaced to work as intended. So if that is not an option, paper logs are OK. No one should worry about logging software – or lack of it. Each operator can use whatever logging method works for him/her. And if the program used doesn't generate an accurate score, no worries. The log-checking team at Orca DXCC will make sure everyone gets the points s/he is entitled to.

For rules and tools – like multiplier lists and helpful hints – and background info, visit <http://orcadxccc.org/bcqp.html>

If anyone has any questions about BCQP 2014, I'm ready to answer. Email me at bcqp@orcadxccc.org or va7bec@rac.ca

I'll be running the sponsor call VA7ODX on phone. Hope to give out bonus points to lots of stations near and far.

73 and GL,

Rebecca VA7BEC

Orca DXCC, Contest Coordinator, BCQP





Field Day Is A Team Effort

Are you one of those members who feels that you have been excluded from participation in SARC/SEPAR's Field Day because you are not one of the "ace" operators? Since Field Day is supposed to be a dress rehearsal for a real emergency where HF radio communication may be required on short notice, it is

obviously an important event in the life of radio clubs. The approach in years past has been to put forth a modest effort, have some fun and enjoy the socialization while making as many radio contacts as possible. More recently, the focus has shifted to a more demanding objective, i.e. to showcase emergency preparedness and demonstrate to the public and the response agencies that the skills required to set up complex equipment, operate it and make radio contacts efficiently and accurately without external power, have been learned well.

Because our counterparts in other parts of North America are doing the same thing, Field Day is, by design, a contest against ourselves and against others. The competitive nature of FD is a driving force towards performance excellence. In other words this is primarily a skill-testing and demonstration event with the "fun/social" aspects taking second priority. Ever wonder why we do the "bonus" events at the same time as operating radios? They are for the purpose of giving amateur radio more exposure to the public and to the response agencies and to encourage non-amateurs and new amateurs to get involved; naturally, bonus activities earn bonus points. This shift to a winning objective was a conscious decision of the SARC and SEPAR Directors about 3 years ago; the impetus for the operator training program was launched about the same time, as it was apparent that too few of our members possessed the required operating skills to achieve top performance.

So if you are one of those who feels that Field Day is passing you by, give some thought to what effort you have made to participate. Here's how you can feel "included":

1. Join the Field Day core planning team and take on full responsibility for organizing and implementing a major component of FD
2. If you can't get involved in the full planning, then make it known that you are available to take on a specific FD task under direction
3. Join the operator training group to learn from the experts how to move from a mediocre operator to a skilled operator
4. Participate in as many contests as possible throughout the year to hone these skills
5. Get your home HF station functional and practice what you have learned

If fun and socialization are primarily what you seek, you may still find it at Field Day by joining the group which doesn't operate radios but instead assist with setup, takedown, bonus activities or a support function. These non-operating activities are just as critical to our success as sitting at a radio, and are excellent experience if we are faced with an emergency situation and are called out to help with radio communications.

Bear in mind also that, while FD is not primarily a social occasion, a number of other events during the year take place where fun and social activity are the main focus, e.g. the Christmas party, post-meeting socials, flea markets and swap meets, Fox Hunt

barbeques, etc. And, if we have volunteers step forward to help carry the load of organization and execution, we can have other (fun and social) field operating events during the spring and summer where all participating radio operators have an opportunity to get on the air (e.g. Summits On The Air—SOTA, or Islands On The Air—IOTA, or the less competitive contests).

Field Day, is, therefore, mainly about radio operation and performance. If you don't feel that this is the right objective for SARC, then I encourage you to step forward as a member of the Field Day core planning team and influence a change to your liking.

The Field Day organizing committee has commenced its planning for Field Day 2014. The team presently consists of: Brett VE7GM, Fred VE7IO, Jim VE7FO, Stan VA7NF, John VE7TI and John VA7XB.

Having performed so well at Field Day 2013, we now have a reputation to uphold and the competition will likely rise to the challenge of moving us lower on the list by a more aggressive effort on their part. Naturally we are going out to improve our score in 2014. The consensus from last year's post-FD analysis is that there are many areas where we can improve. With this in mind, the FD organizing Committee is considering some radically different strategies which you will hear more about in coming months.

We expect there to be a lot of competition for FD operating slots this year, so not everyone who wishes to operate can be accommodated. It is not sufficient to simply want to do it even if you have historically operated at past FDs. This year, priority will be given to those who have followed the set of guidelines set out by Brett in the October 2013 Communicator. Let's summarize: you will be given priority for a FD radio operating shift if you:

1. Are a SARC or SEPAR member, and
2. Are already a proven expert tester or,
3. If a trainee ...
 - Have participated throughout the year in five or more training events
 - Have attained a high degree of proficiency as demonstrated in the scheduled events
 - Have mastered the ability to Run in two or more modes for several hours at a time at a high rate and accuracy
 - Are proficient in the use of N1MM, the logging software
 - Have come prepared for each contest by having read and understood the rules
 - Have operated 2 or more contests from home in between scheduled events, and have submitted your log to the contest organizers

So if you aspire to operate radios at Field Day, you must have demonstrated that you are fully capable. Don't leave it to chance and be disappointed. Should you not make the grade this time, please consider the large number of contests scheduled throughout the year as an opportunity to train and qualify in future years. But also keep in mind that we rely on the dedicated group of volunteers to pitch in and take on the many supplementary tasks which fulfill the public education component and make it possible for others to make the radio contacts. We hope you will be one of these willing team members.

~ John VA7XB